

REMARKS

Claims 1-4, 6-15 and 18-47 are pending, with claims 1-4, 7-10, 12-14, 24, 40 and 44 being independent. Claims 1-4, 7-10, 12-15 and 24 have been amended, and claims 38-47 have been added.

Claims 1-3, 6-9, 11, 14, 18, 19, 21, 22 and 27 have been rejected as being anticipated by Hirakata, U.S. Patent No. 6,496,172. With respect to claim 1 and its dependent claim 6, applicant requests reconsideration and withdrawal of this rejection because Hirakata does not input display signals having the same polarity to pixel electrodes in a vertical line, where the polarity is independently controlled for each vertical line of pixels and changed irregularly in a certain fixed period, as recited in claim 1. In particular, Hirakata changes the polarity of signals applied to different vertical lines of pixels according to a fixed sequence of four polarity patterns in which adjacent pairs of vertical lines are either both on or both off. See Hirakata at Fig. 1A; see also Hirakata at col. 5, lines 54-58 (noting that signals of the same polarity are applied to every n adjacent lines, when n is 2 or more). As such, the polarities in Hirakata's system are not "independently controlled for each vertical line" or "changed irregularly in a certain fixed period" as recited in claim 1. For at least these reasons, the rejection should be withdrawn.

Like claim 1, independent claims 2, 3 and 7-9 recite that display signals having the same polarity are input to pixel electrodes in a vertical line, where the polarity is independently controlled for each vertical line of pixels and changed irregularly in a certain fixed period. Similarly, independent claim 14 recites that the polarities of the display signals input to pixel electrodes in a vertical line change together, and that a particular polarity of display signals input to the pixels electrodes in the vertical line is changed irregularly in a certain fixed period. As discussed above with respect to claim 1, Hirakata does not show these features. Accordingly, applicant requests reconsideration and withdrawal of the rejection of claims 2, 3 and 7-9, and their dependent claims, for at least these reasons.

Claims 4, 10, 12, 13, 15, 20 and 23-26 have been rejected as being anticipated by Cole, U.S. Patent No. 6,469,684. With respect to claim 4, applicant requests reconsideration and withdrawal of the rejection because Cole does not describe or suggest an arrangement in which

the polarities of the display signals input to pixel electrodes in a vertical line change together. Instead, Cole's system controls the polarities of the signals applied to each pixel. Thus, while Fig. 3, frame 2 of Cole happens to show a situation in which the polarities of the signals applied to the pixels in the second vertical line have the same value, Cole nowhere describes or suggests changing the polarities of those signals together. For example, frame 3 of Cole's Fig. 2 shows only the polarity of the signal applied to one of the pixels in the second vertical line as having changed, and does not show the polarity of the signals applied to the pixels in the second vertical line to be changing together.

Like claim 4, independent claims 10, 12, 13 and 24 recite that the polarities of the display signals input to pixel electrodes in a vertical line change together. As discussed above with respect to claim 4, Cole does not show these features. Accordingly, applicant requests reconsideration and withdrawal of the rejection of claims 10, 12, 13 and 24, and their dependent claims, for at least these reasons.

New independent claim 40 recites, among other elements, "controlling the display signals input to pixel electrodes in a vertical line to have a same polarity," and "irregularly changing the pixels to which display signals having a particular polarity are input in a certain fixed period having a duration that exceeds four frame periods." Similarly, new independent claim 44 recites, among other elements, that "display signals input to pixel electrodes in a vertical line have a same polarity" and that "pixels to which display signals having a particular polarity are input are changed irregularly in a certain fixed period having a duration that exceeds four frame periods." Support for these elements of claim 40 and 44 may be found in the application at, for example, Fig. 2, and support for the remaining elements may be found, for example, in the claims as originally filed.

Claims 40 and 44 are believed to be allowable over Hirakata for at least the reason that, as has been previously discussed, Hirakata describes a system in which the polarities sequence between a series of four polarity patterns over four frame periods such that the polarities could not be said to be irregularly changed in a period having a duration that exceeds four frame periods. Claims 40 and 44 are believed to be allowable over Cole for at least the reason that, as

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has been previously discussed, Cole does not describe or suggest controlling the display signals input to pixels in a vertical line so as to have the same polarity.

Applicant submits that all claims are in condition for allowance.

Enclosed is a \$2,140 check (\$790 for request for continued examination fee, \$900 for excess claim fees and \$450 for the Petition for Extension of Time fee). Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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